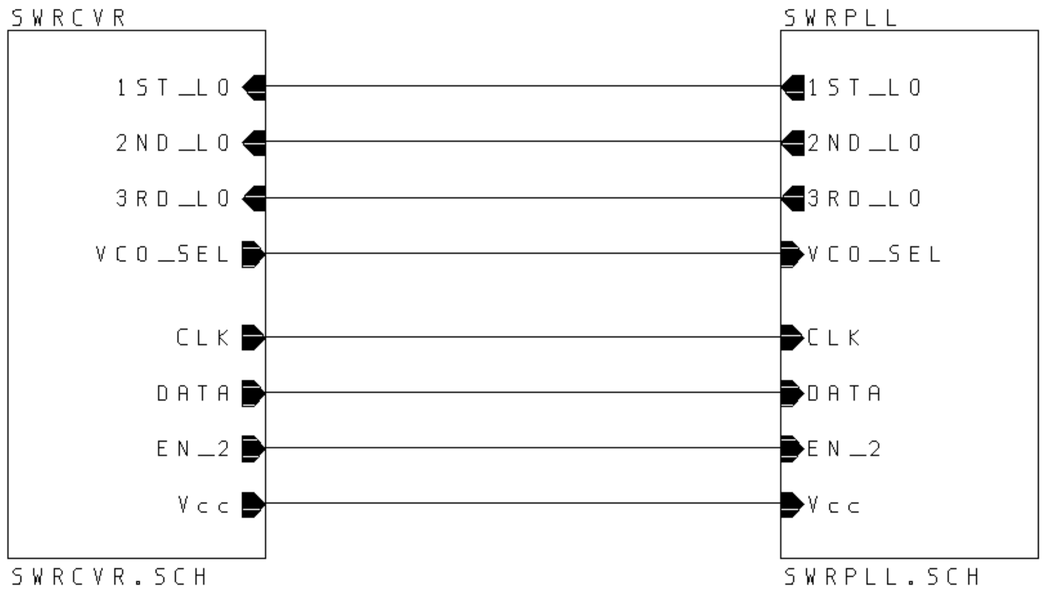
Note: all measurements with a 20,000 ohms per volt meter

U2 pin	U2 volt	U16 pin	U16 volt
1	1.0	1	2.2
2	1.2	2	2.4
3	0.15	3	2.6
4	3.4	4	2.1
5	0.15	5	5.2
6	0.15	6	5.2
7	0.15	7	0
8	0	8	0
9	0.8	9	0
10	1.5	10	0
11	1.5	11	5.2
12	2.8	12	0
13	1.5	13	0
14	0	14	5.2
15	0.8	15	5.2
16	4.8	16	5.2

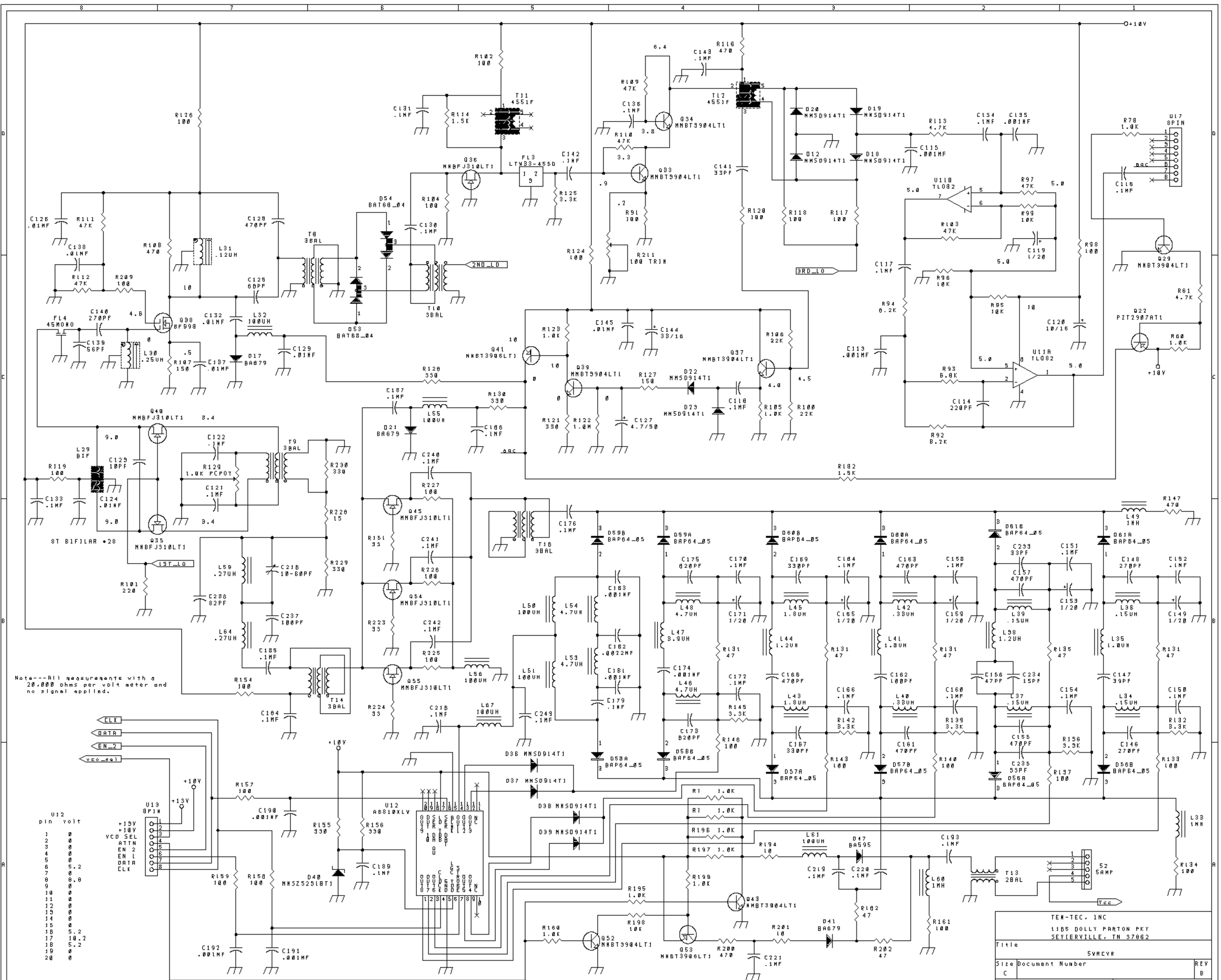
2ND_LO
3RD_LO
1ST_LO
LB2 100UH
R46 82K
Q18 MMBT3904LT1
R47 680K
C59 33/16
C14 .01MF
R5 47K
D1 RLS135
6.2
7.6
R39 1.0K
L10 4.7UH
7.7
R1 100
C28 .01NF
C48 2.2PF
R2 220
L11 4.7UH
L6 .56UH
L7 .47UH
8.4
C3 10PF
C2 18PF
C1 10PF
2.0
R3 10K
R4 100
C5 .01NF
C4 22PF
Q1 MMBFJ310LT1
0
Q9 MMBT3904LT1
6.0
C13 .01MF
R30 10K
C27 BB620
C26 BB620
L16 .19uH
C8 470PF
L15 .047UH
3.5
R6 150
Q9 MMBT3904LT1
R7 1.5K
C8 .01MF
D2 RLS135
C7 .01MF
4.8
R54 47K
L12 4.7UH
Q4 MMBFJ310LT1
C25 BB620
L16 .342uH
L8 4.7UH
C24 BB620
L17 .047UH
C9 470PF
2.4
R8 150
C10 .001MF
2.0
L58 1.5UH
Q7 MMBFJ310LT1
8.0
R11 47
R10 10
L57 1.0UH
T15 3BAL
9.4
C40 .01MF
C44 10PF
L4 .15UH
L5 .1UH
C11 39PF
C12 68PF
C46 39PF
Q5 MMBT3904LT1
R35 10K
5.4
R9 10K
.75
C43 .01NF
R28 1.0K
Q6 MMBT3904LT1
.15
C15 .01MF
vco_sel
C60 .1MF
C17 .01NF
C16 .01NF
L1 15UH
L2 15UH
C18 .0082MF
C19 .022NF
C20 .0082NF
C38 .1MF
U2 74LS390
C210 .1MF
R24 100
C230 .1MF
R189 27
C22 .01MF
8.2
1.6
Q14 MMBT3904LT1
R23 22K
C50 100PF
R22 10K
X1 4.67MHZ
C225 47PF
C21 .01NF
4.0
R21 4.7K
R36 220
C51 220PF
C33 33/16
R31 100
10.2
R176 100
R40 47K
Q48 MMBT3906LT1
D55 MMSD914T1
9.8
C212 10/16
7.6
1.8
R188 22K
C54 .47MFD
5.2
Q47 MMBT3904LT1
Q46 MMBT3904LT1
R38 470
R174 470
R175 10K
C203 .1MFD
R189 4.7K
C49 4.7PF
C39 68PF
L14 .12UH
C34 470PF
R28 1.5K
L3 1.0UH
C36 5-30PF
2.5
Q8 MMBT3904LT1
1.8
R37 100
T1 2BAL
C95 .01NF
R20 100
R29 9.3K
8.3
L68 100UH
C231 .1NF
R187 100
C211 .01NF
U4 TCXO
VCC NC OUT GND
C238 .01NF
U16 MC145170
C45 .001MF
C198 .001NF
R213 10M
R186 220
R25 100
C214 33/16
C215 .1NF
R180 330
R181 330
5.1
D46 MMSZ5231BT1
+10V
R214 330
R215 330
R50 100
data
R48 100
en_2
R49 100
clk
C62 .001MF
C63 .001NF
C61 .001MF
+13V
L13 25UH
Vcc
S1 2AMP
C56 .1MF
C42 100/35
U3 NJM7810FA
C57 100/35

TEN-TEC, INC
1185 DOLLY PARTON PKY
SEVIERVILLE, TN 37862

Title		
	5VRPLL	
Size C	Document Number	REV
Date: December 12, 2001	Sheet 2 of 3	



TEN-TEC, INC 1185 DOLLY PARTON PKY SEVIERVILLE, TN 37862		
Title RX-350		
Size A	Document Number	REV A
Date: December 14, 2001	Sheet 1 of 3	


+10V
R102 100
R126 100
T11 4551F
C131 .1NF
R114 1.5K
R116 470
C143 .1NF
6.4
R109 47K
C136 .1NF
Q34 MMBT3904LT1
3.8
T12 4551F
R110 47K
3.3
Q36 MMBFJ310LT1
FL3 LTW83-455D
C142 .1NF
R125 3.3K
Q33 MMBT3904LT1
.9
.2
R91 100
R211 100 TRIM
C141 33PF
R120 100
R118 100
R117 100
D20 MMSD914T1
D12 MMSD914T1
D19 MMSD914T1
D18 MMSD914T1
R113 4.7K
C134 .1NF
C135 .001MF
C115 .001MF
U11B TL082
R97 47K
R99 10K
R103 47K
C119 1/20
5.0
C126 .01MF
R111 47K
C128 470PF
C138 .01NF
R112 47K
R209 100
R108 470
L31 .12UH
T8 3BAL
C125 68PF
D54 BAT68_04
C130 .1NF
R104 100
2ND_LO
T10 3BAL
D53 BAT68_04
R124 100
3RD_LO
C140 270PF
4.6
FL4 45MONO
Q38 BF998
C139 56PF
L30 .25UH
C132 .01NF
L32 100UH
R107 150
C137 .01MF
D17 BA679
C129 .01MF
R120 330
C145 .01MF
C144 33/16
R123 1.0K
Q41 MMBT3906LT1
Q39 MMBT5904LT1
Q37 MMBT3904LT1
R106 22K
R127 150
D22 MMSD914T1
D23 MMSD914T1
C118 .1MF
R105 1.0K
R100 22K
4.5
4.0
C187 .1MF
L55 100UH
R130 330
D21 BA679
C186 .1NF
C240 .1MF
R121 330
R122 1.0M
C127 4.7/50
AGC
R182 1.5K
Q40 MMBFJ310LT1
3.4
9.0
L29 BIF
C129 10PF
R119 100
C133 .1MF
C124 .01MF
C122 .1NF
R129 1.0K POT
C121 .1MF
T9 3BAL
R230 330
R220 15
R229 330
8T B1F1LAR #28
Q35 MMBFJ310LT1
1ST_LO
R101 220
C238 82PF
L59 .27UH
C218 10-60PF
C237 100PF
L64 .27UH
C185 .1MF
R227 100
Q45 MMBFJ310LT1
R151 33
C241 .1MF
R226 100
Q54 MMBFJ310LT1
R223 33
C242 .1MF
R225 100
Q55 MMBFJ310LT1
R224 33
C218 .1MF
L67 100UH
C249 .1MF
L56 100UH
T14 3BAL
R154 100
C104 .1MF
L50 100UH
L54 4.7UH
L53 4.7UH
L51 100UH
T15 3BAL
C176 .1MF
D59B BAP64_05
D59A BAP64_05
D60B BAP64_05
D60A BAP64_05
D61B BAP64_05
D61A BAP64_05
C175 820PF
C170 .1MF
C169 330PF
C164 .1NF
C163 470PF
C158 .1MF
C233 33PF
C151 .1MF
C148 270PF
C152 .1NF
C157 470PF
C153 1/20
C139 .15UH
L38 1.2UH
L36 .15UH
C149 1/20
L48 4.7UH
L45 1.8UH
L42 .33UH
L41 1.8UH
L39 .15UH
L35 1.0UH
C171 1/20
C165 1/20
C159 1/20
L47 3.9UH
L44 1.2UH
L41 1.8UH
C174 .001MF
C168 470PF
C162 100PF
C156 47PF
C234 15PF
C147 39PF
C183 .001MF
C182 .0022MF
C181 .001MF
C179 .1MF
C173 820PF
C167 330PF
C161 470PF
C155 470PF
C235 33PF
C146 270PF
L46 4.7UH
L43 1.8UH
L40 .33UH
L37 .15UH
L34 .15UH
C172 .1MF
C166 .1NF
C160 .1MF
C154 .1MF
C150 .1NF
R145 3.3K
R142 3.3K
R139 3.3K
R132 3.3K
R146 100
R143 100
R140 100
R133 100
R131 47
R135 47
R137 100
R156 3.5K
D58B BAP64_05
D58A BAP64_05
D57A BAP64_05
D57B BAP64_05
D56B BAP64_05
D56A BAP64_05
R147 470
L49 1NH
R98 100
C117 .1NF
R96 10K
R94 6.2K
R95 10K
C120 10/16
C113 .001MF
R93 6.8K
C114 220PF
R92 8.2K
U11A TL082
R78 1.0K
U17 8PIN
C116 .1MF
Q29 MMBT3904LT1
R61 4.7K
Q22 PZT2907AT1
R60 1.0K
+10V
Note---All measurements with a 20,000 ohms per volt meter and no signal applied.
CLK
DATA
EN_2
vco_sel
+10V
+13V
U13 8PIN
+13V
+10V
VCO SEL
ATTN
EN 2
EN L
DATA
CLK
U12
pin volt
1 0
2 0
3 0
4 0
5 0
6 5.2
7 0
8 8.0
9 0
10 0
11 0
12 0
13 0
14 0
15 0
16 5.2
17 10.2
18 5.2
19 0
20 0
U12 AB810XLV
R157 100
C190 .001NF
R155 330
R156 330
C189 .1NF
D40 MMSZ5251BT1
R159 100
R158 100
C192 .001NF
C191 .001MF
D38 MMSD914T1
D37 MMSD914T1
D36 MMSD914T1
D39 MMSD914T1
R7 1.0K
R7 1.0K
R196 1.0K
R197 1.0K
R194 10
L61 100UH
D47 BA595
C193 .1NF
R199 1.0K
C219 .1NF
C220 .1NF
L60 1MH
T13 2BAL
52 5AMP
Vcc
L33 1NH
R134 100
R195 1.0K
R198 10K
Q43 MMBT3904LT1
R160 1.0K
Q52 MMBT3904LT1
Q53 MMBT3906LT1
R200 470
R201 10
C221 .1NF
D41 BA679
R162 47
R202 47
R161 100
TEN-TEC, INC
1185 DOLLY PARTON PKY
SEVIERVILLE, TN 37862
Title
5VRCVR
Size C
Document Number
REV B
Date: December 20, 2001 Sheet 3 of 3